

The Official Action rejects claims 2, 3, 5, 6, 13-16, 18-22, 24, 31-34, 36-40, 42, 44-47 and 49-52 as obvious based on the combination of Figure 2 of the present specification, which the Official Action refers to as "Applicant's admitted prior art (AAPA)," JP 11-224781 to Nagayama, which the Official Action refers to as "JP '781," and U.S. Patent No. 6,538,374 to Hosokawa. The Applicant respectfully traverses the rejection because the Official Action has not made a *prima facie* case of obviousness.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some reason, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some reason to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Independent claims 2, 3, 5 and 6 recite an interlayer insulating film over a thin film transistor; an anode over the interlayer insulating film; an insulating film over a leveling surface of the anode, wherein the insulating film contains at least one of polyamide and acrylic; and an organic compound layer over the anode with the insulating film interposed therebetween.

In the wake of the recent Supreme Court decision of KSR Int'l Co. v. Teleflex Inc., 127 S.Ct. 1727 (2007), the PTO's Deputy Commissioner for Patent Operations

issued on May 3, 2007, a memorandum to all Technology Center Directors ("May 3, 2007 Memo") noting that "a showing of 'teaching, suggestion, or motivation' to combine the prior art to meet the claimed invention could provide a helpful insight in determining whether claimed subject matter is obvious under 35 U.S.C. § 103(a)." However, whatever test for obviousness may be employed, "the analysis supporting a rejection under 35 U.S.C. § 103(a) should be made explicit, and it [is] 'important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements' in the manner claimed." (May 3, 2007 Memo; emphasis added). Thus, the law still requires a reason for combining references (e.g., a benefit), and that reason must have "rational underpinning to support the legal conclusion of obviousness." In re Kahn, 441 F.3d 977, 988 (Fed.Cir. 2006) (cited with approval in KSR, 127 S.Ct. 1727). Against this legal backdrop, the Applicant respectfully submits that the Examiner has fallen well short of his burden in making the pending obviousness rejections based on the combination of AAPA, JP '781 and Hosokawa.

There is no proper or sufficient reason, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify AAPA, JP '781 and Hosokawa or to combine reference teachings to achieve the claimed invention. MPEP § 2142 states that the examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. It is respectfully submitted that the Official Action has failed to carry this burden. While the Official Action relies on various teachings of the cited prior art to disclose aspects of the claimed invention and asserts that these aspects could be used together, it is submitted that the Official Action does not adequately set forth why one of skill in the art would combine the references to achieve the features of the present invention.

The test for obviousness is not whether the references "could have been" combined or modified as asserted in the Official Action, but rather whether the references should have been. As noted in MPEP § 2143.01, "The mere fact that

references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.” In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990) (emphasis in original). Thus, it is respectfully submitted that the standard set forth in the Official Action is improper to support a finding of *prima facie* obviousness.

The Official Action relies on layer 203 of the AAPA to allegedly teach an interlayer insulating film over a thin film transistor; on layer 205 of the AAPA to allegedly teach an anode over the interlayer insulating film; and on layer 206 of the AAPA to allegedly teach a light emitting compound organic layer. The Official Action concedes that “AAPA does not expressly disclose that the device can further include an insulating film between the anode and the organic compound layer” (page 3, Paper No. 20070611). The Official Action relies on film 109 of JP ‘781 to allegedly teach the insulating film. However, the film 109 is not formed over a thin film transistor and is not formed between the anode and the organic compound layer. Without any specific references to the AAPA or JP ‘781 in support and without statements which establish the level of ordinary skill in the art at the time of the present invention, the Official Action asserts that these modifications would have been obvious (pages 3-4, Id.). In order to render obvious the present claims, the Official Action would have to demonstrate a reason why one of ordinary skill in the art at the time of the present invention would have been motivated to insert the insulating film 109 of JP ‘781 between the bank 208 and light emitting compound organic layer 206 of the AAPA. The Official Action has not demonstrated such reason.

Also, the Official Action concedes that “AAPA and JP ‘781 [do] not expressly disclose that the polymer insulating film can be formed of polyamide or acrylic” (page 4, Id.). The Official Action asserts that “it would have been [obvious] ... to further incorporate the art-known acrylic or polyamide insulating film such as that of Hosokawa into the light-emitting device collectively taught above by AAPA and JP ‘781, so that a light-emitting device with desired insulating properties and/or with desired material

choice would be obtained, as it has been held that: The selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945)" (Id.). The Applicant respectfully disagrees and traverses the above assertions in the Official Action.

In addition to the fact that the Official Action does not demonstrate why the insulating film 109 of JP '781 should be inserted between the bank 208 and light emitting compound organic layer 206 of the AAPA, it is noted that JP '781 teaches that the insulating film 109 is made of polyimide (see paragraph [0023]). JP '781 does not teach or suggest that the insulating film 109 could or should be made of at least one of polyamide and acrylic. The Official Action apparently asserts that Hosokawa cures these deficiencies in the AAPA and JP '781.

Hosokawa does not cure the deficiencies in the AAPA and JP '781. However, reference numeral 13 in Hosokawa is referred to as "an interlayer insulating film" (see column 15, lines 60-67). As such, the interlayer insulating film 13 of Hosokawa might, arguably, correspond to the interlayer insulating film 203 of the AAPA. Hosokawa does not teach that the film 13 should be used between a bank and a light emitting compound organic layer. The Official Action has not demonstrated why one of ordinary skill in the art at the time of the present invention would have had a reason to substitute the material used to form the interlayer insulating film 13 of Hosokawa for the material used to form the insulating film 109 of JP '781. Also, it is not clear why such hypothetically modified film would then be inserted between the bank 208 and light emitting compound organic layer 206 of the AAPA.

Therefore, the Applicant respectfully submits that the interlayer insulating film 13 in Hosokawa is distinguished from the insulating film of the claimed invention, and that there is no reason to incorporate the interlayer insulating film 13 in Hosokawa into the insulating film 109 of JP '781. As such, the prior art of record does not teach a reason why the AAPA, JP '781 and Hosokawa should have been combined so as to

necessarily form an interlayer insulating film over a thin film transistor; an anode over the interlayer insulating film; an insulating film over a leveling surface of the anode, wherein the insulating film contains at least one of polyamide and acrylic; and an organic compound layer over the anode with the insulating film interposed therebetween.

Therefore, the Applicant respectfully submits that the Official Action has not provided a proper or sufficient reason, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify AAPA, JP '781 and Hosokawa or to combine reference teachings to achieve the claimed invention.

In the present application, it is respectfully submitted that the prior art of record, either alone or in combination, does not expressly or impliedly suggest the claimed invention and the Official Action has not presented a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.

For the reasons stated above, the Official Action has not formed a proper *prima facie* case of obviousness. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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